THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, MARCH 28, 1835.

To Correspondents.

The communication of "*A Farmer*," which we publish to-day, though dated about six weeks since, only reached us the present week. We thank him for it, and should have been glad to have given it an earlier insertion. Believing that the subject will be interesting to our farmers, we commence the publication of a Treatise on the Culture of Hemp as it is practiced in Kentucky, by the Hon. Henry Clay, written a few years since for an Agricultural paper then published at Cincinnati. It furnishes much useful information. The reader, however, will bear in mind that the Machine described by our correspondent, the utility of which has been abundantly proved, has been brought into use since Mr. Clay wrote, and consequently the heavy expense to which he alludes, of preparing it for market by hand, is now obviated.

The communication from a "*Monroe Farmer*" will be read with interest. We regret that he did not extend his observations a few years farther back,—say ten,—that we might know what would be the average crop per acre for ten years. We hope he will find time to furnish us farther transcripts from his farm record.

We are glad to find that we are not forgotten by several of our old and valued correspondents. A private letter from *Ulmus* informs us that our readers may soon expect to hear from him; and we have the present week received communications from *Ontario* and Mr. *W. W. Powell*—the first we give this week, and shall publish the other in our next.

"*Niagara*" and "*Retus*," both new correspondents, from whom we shall be glad to hear again, will appear next week.

Ploughs.

We shall be much pleased to receive an answer to the following request from a correspondent at Columbus, Ohio:

"MR. TUCKER—Will you request some of your correspondents to furnish an essay on the *Plough*, in which the true principles of its construction shall be laid down."

"CREDIT."—Several Editors do us great injustice by repeatedly and extensively copying from our pages without giving any intimation from whence they obtain their articles. The editors of the "Poughkeepsie Journal," and "The Reflector," Schenectady, both first rate papers, and which we should much regret to lose from our exchange list, are particularly careless in this respect. We are not very sensitive on this point, or we should have occasion to make frequent complaints, as we do not believe that more than one half the articles taken from this paper are properly credited.

From an advertising sheet issued from the Office of the Baltimore Farmer and Gardener, by I. IRVINE HITCHCOCK, we select the following paragraphs, under the impression that they contain information that is often wanted.

Different Breeds of Cattle.

Improved Durham Short Horned Breed.—Cattle of this breed are large and handsome, generally white or pied. They require *indispensibly* very rich pastures or other good food in abundance, and when thus treated they are very fine stock both for the dairy and the shambles, but on poor or common keep they are apt to disappoint purchasers.

Averages Prices—CALVES, either male or female, under one year old, about $100. From one year to two years old, $150 to $300. Bulls that are *very good* are often sold at $400 to $600, and even higher. *Half-blood* and upwards, sell at from one third to one half these prices.

Devons, or Devonshire Breed.—This is a beautiful race of cattle. Their color is *uniformly* dark red, and their hair very short and glossy. Their forms are exceedingly neat; horns long and handsome; limbs very delicate, and their *manners* gentle and docile. They are of small size, weighing from 400 to 700 pounds. The cows are remarkable rather for the rich quality than the great quantity of their milk. The oxen are the most agile and the handsomest that are known. But the most remarkable quality of these cattle is that they are hardy and very easily kept, thriving upon common and even poor pastures. They are easily fattened and make excellent beef.

Average Prices—CALVES, under one year old, $50 to $75. From one year old to two, $75 to $100. Older bulls often sell higher, even to $200, but good cows can generally be had for $100 each.

Different Breeds of Sheep.

Bakewell Breed.—These sheep are very large and of most beautiful form; their wool is long, suitable for combing and for coarse fabrics; the fleece weighing from 6 to 10 pounds, and even much higher, and the carcass is excellent for the shambles.

Average Prices.—RAMS of the current year from $25 to $50. One year old and upwards $50 to $100, according to quality. EWES—lambs $20 to $30; one or more years old $25 to $50. Lambs ought to be removed in the fall months.

Southdown Breed—The general characteristics of this breed are nearly similar to those of the Bakewell, and by many judicious farmers they are considered equal to them in value. *Average prices* somewhat lower.

Saxony, Merino, and other fine wooled breeds. First rate individuals of these kinds for breeders can generally be obtained, costing nearly as high as those already mentioned, say $25 to $50 each.

Different Breeds of Swine.

Viewing this as one of the most important kinds of live stock for the farmer, and convinced that the choice in breeds is very great and important, the proprietor has exerted himself, and is still doing so, to procure without regard to expense, *the best that can be obtained.* The grand object in view by the farmer should be to obtain at a given age of his hogs the greatest quantity of good meat at the least expense of feed. For this purpose the following breeds are recommended, viz:

The Barnitz Breed, obtained by the Hon. Cha's A. Barnitz, of Pennsylvania; by a cross of the celebrated Chester county hog with the China or grass breed. These swine are white, of beautiful form, with small ears, and will live and thrive on grass alone; requiring no other feeding except for a few days before slaughtering. Their average weight at 12 months old is from 250 to 300 lbs. [See Am. Farm. vol. 14, p. 209, and vol. 15, p. 201.]

The Norfolk Thin-rined Breed, was imported from England in 1830; they are found to be very valuable in New-England, whence they were obtained for this establishment in 1834. They are white, or slightly spotted with black, very handsome, and, like the Barnitz hogs, very easily kept. They weigh at 18 months old from 450 to 500 pounds.

The Mackay Breed was produced on the farm of Capt. John Mackay, of Massachusetts, who for many years sought and brought home from various parts of the world, (he being a sea captain,) the finest specimens of swine he could find. These he crossed so judiciously as to produce a variety which for easiness to keep, aptitude to fatten at any age, large size and extraordinary beauty are unrivaled. The specific characteristics of this breed are, head short and small, chest very broad, back tolerably broad and rather falling below than raising above a straight line, bodies very long, gammons large, legs short and small, habits quiet and peaceable, color generally white. The competition for the premiums on swine of the Mass. Ag. Society, has for many years been chiefly between this breed and the great spotted Woburn, or Duke of Bedford Breed; and of these premiums Capt. Mackay has taken on his breed within the last six years upwards of $200. These hogs grow to nearly equal weight with the Norfolk Thin-rined breed, say 350 to 450 pounds.

Fourth, the celebrated *Parkinson*, or *Bedford*, or large *Spotted Woburn* Hog, the favorite of the Duke of Bedford, which were brought from England to this country by Mr. Parkinson many years ago, as a present to Gen. Washington. The characteristics of the Bedford or Woburn breed are—heads short and small; backs broad and rather arched; sides long and deep; gammons very heavy in proportion to the rest of the carcass; legs short and small, and constitutions very hardy; subsist well on grass.

Price.—For pigs weighing not more than 40 lbs. $5 each, and 12½ cents per lb. for all over 40 lbs.

Poultry.

White Turkies.—These are uniformly white and very beautiful, and said to be as valuable for the table as any other. *Price*, $5 a pair.

Westphalia and Bremen Geese.—These two varieties are very similar—the former rather larger than the latter. They are uniformly pure white, with scarlet legs and bills, and are much larger than the common grey goose, weighing from 15 to 25 lbs. each.

The Buffalo Berry.

Buffalo Berry, or *Shepherdia* [*argentea*,] from the Rocky Mountains; has beautiful foliage, and every limb and twig is covered with edible red berries, resembling currants, in both appearance and taste. It grows 20 feet high, is perfectly hardy, and highly ornamental.

Note.—This tree is ascertained to be *diœcious*. It is therefore necessary for the production of fruit to have one male plant, and one [or more] female.

American Grape Vines.

The following are the principal kinds which have been proved to succeed best in our country, particularly in the middle states. They are therefore confidently recommended for both gardens and vineyards. They are all VERY GOOD GRAPES, ☞ *when properly ripened*, for both table and wine. They are constant and sure bearers, and not liable to be winter killed nor blasted.

Red Bland, or Powell; of good size, juicy, sweet, and of very pleasant flavor.

Catawba, or Red Muncy; large, of delicate flavor, lilac color, very abundant bearer, *excellent.*

Herbemont's Madeira, or Warrenton; purple, round, very hardy, excellent for wine and table.

Isabella, or Gibbs' Grape; large, oval, dark purple, most abundant bearer, *very excellent.*

White Scuppernong, or Roanoke, or American Muscadine, or Hickman Grape, native of N. C.; white, sweet and of good size; *but it does not succeed well north of lat.* 37.

Gama Grass.

This is a coarse strong grass, indigenous to all the southern states, but has been but partially cultivated. Its growth and product are prodigious, and all kind of gramnivorous animals eat it with avidity. Plant the seed in either of the fall months in a bed in the garden—it will come up in the spring. At one year old transplant the roots to any kind of soil except a very wet one—even a pine barren will answer, if well manured—set the roots two feet apart each way, and the second year from transplanting they will quite cover the ground. This meadow will afford a heavy crop of grass either for soiling or hay once a month for five or six months every year, and the roots penetrate the ground to such a depth as almost to defy frost or drouth. This qualtity of the roots renders this grass very valuable for covering the steep sloping banks of canals and railroads. If suffered to go to seed it becomes too coarse for good hay. Seed 50 cents per ounce, (containing about 200 seeds.) Roots fit for transplanting, $2 per hundred.

Mangel Wurzel.

Mangel Wurzel, or Field Beet; highly valuable, both tops and roots, for feeding live stock. It produces 30 tons and upwards of roots to the acre; to be managed like the Garden Beet, with room between the rows to cultivate. Four pounds of seed to the acre—price $1 per pound.

Skinless Oats.

Skinless, or rather *Huskless Oats; new here.* The grain is naked like wheat; they were brought from China into England in 1830, where they were sown in May and reaped early in August, producing upwards of 80 bushels to the (Irish) acre, each bushel said to be worth three or four times more than the common oat. A few have been imported this fall—price at present $1 per quart.

Ruta Baga.

Ruta Baga, or large yellow Swedish Turnep, equal to the Mangel Wurzel for productiveness and as food for live stock; about 1½ pounds of seed to the acre, to be sown early in July.

Agricultural Papers.

It is respectfully suggested that those farmers err who view a subscription to a well conducted agricultural paper in the light of an expense or tax. This item ought to be classed by them with the cost of manure—both *may* indeed be dispensed with, but not advantageously. Why should the influence of the printing press, which is *literally* revolutionizing the world, be lost to the farmer? Surely there is no human employment which more deserves its aid, nor to which such aid can be more useful than to the fundamental art of Agriculture.

The following notice of two varieties of American Grape Vines, not mentioned in the list given above, is from a letter of D. O. Norton, of Richmond, (Va.) to the Editor of the Farmer's Register:—

"*Norton's Virginia Seedling*, has never been known to rot or mildew: neither is the wood at all injured by the most severe winter, in any exposure. The bloom for the last ten years, that is, ever since its first bearing, has resisted the ravages of spring frosts. The berries are so closely congregated on some bunches, as to indent one another: yet they all prove equally ripe at the same period of time. So replete are they with the saccharine principle, that if a bunch at full maturity be closely compressed in the hand, it will continue to adhere even after the fingers are expanded; and if a bunch is accidentally suffered to remain on the vine after the first frosts of autumn, the berries become raisins, a circumstance I have never known to take place with any other grape, indigenous or exotic. I have a small cask of wine made from the Seedling, last year. It is luscious beyond any thing you can conceive. Some say it resembles Burgundy Madeira—others the Lacrima Christi of Mount Vesuvius. A young gentleman not long since from that country, (Italy,) says that abroad he should have drank it for the last named wine.

"*The Cunningham's Prince Edward Grape* alike resists the winter and spring frosts, and never fails to produce a crop of excellent fruit, both for the table and the press. As yet I have not a sufficient number of vines to test in a satisfactory manner, the quality of the fruit. What has been made upon a small scale, resembles the wines imported into this place from the house of Murdock and Company: unquestionably the best wine we get from Madeira."

Hot Beds.

Professed Horticulturists often make large hot-beds some weeks earlier than this; but for common farmers, a small one prepared in the early part of next month will not be too late. By a little care and labor in this respect, early cabbages, cauliflowers, &c. may be had in excellent condition for transplanting in the open ground, as soon as the weather is sufficiently settled for their safety. Thus a very important advantage is gained.

The principal requisites are, a bed of horse dung of proper size for supplying heat by its fermentation; a bed of earth placed upon this, to sow the seeds in; a frame to hold this earth and to support the sash; and a sash of lights to place over the whole, to protect the young plants from the cold and throw off the rain

A farmer who wishes to avail himself of the advantages of a hot bed, should proceed immediately in the construction of one. The first thing is to procure a sufficient quantity of unfermented manure, and this may be found at every horse stable where it has been thrown out during the winter. Two or three cart loads are enough for a bed four feet by eight, and two feet high, which height is sufficient when a bed is constructed as late as the present time. Those made earlier must be made higher; as it is necessary in that case to have a supply of heat for a longer time. The manure is to be drawn and thrown in a heap near the intended place for the hot-bed, which is generally most convenient in a corner of the garden. Then begin at one side of it, and make a new heap, shaking every forkful well to pieces, mixing it well together and leaving no lumps.

A bed four feet by eight, will be large enough in most cases. It should be made three inches larger each way than the frame which supports the glass. A stake is to be driven perpendicularly into the ground at each corner of the intended bed to serve as guides in building it. To an inexperienced hand, it may be useful to place boards on their edges on the ground, at the ends and sides, within the stakes, so as to form a sort of open box to *begin* the bed in. Next commence making the bed, by spreading an even layer of manure on the ground within the four corners; beat this down with the fork, and then proceed with similar successive layers, until the bed is raised to a sufficient height. While laying on the manure, *every part should rise equally*, so that the height may at all times be the same in every part; and great care must be taken to keep the *edges* much the most beaten and compact, placing, for this purpose, three or four times more material there than in the middle, and even treading them down, while the middle should be but moderately beaten; or else it will settle most at the edges, leaving a swelling and cracking in the middle.

The frame should be made of plank, dove-tailed together to prevent warping; the best shape is about eighteen inches high on one side and ten inches on the other, the ends having a corresponding slope, in order that the glass when laid on may turn off the rain. The frame when completed will resemble a large shallow box without bottom or lid. It is to be laid upon the bed of manure, and about six or eight inches of rich mould then spread evenly over for receiving the seeds. The sash is not to be made with squares as in the usual manner for windows, for this would prevent the water running off; but it must consist simply of narrow strips running parallel with each other, to receive the edges of the panes, the ends of the glasses overlapping slightly, like the shingles on a roof.* The highest part of the frame is to be placed north, so that the glass may face the sun.

The seeds may be sown in little drills about an inch apart, marking the name of each kind with a pencil upon a stick set up at the end of each row; the lights then placed on the frame; and the heat from the fermenting manure will cause the seeds to vegetate rapidly. As soon as the plants are up, they should have as much *air* as possible without endangering them by the cold. They should be shut up closely by night; and in very cold weather, a mat or blanket should be spread over the glass; but the glass is to be slid partly or wholly off during warmer weather, especially if there be hot sun. The latter precaution is very necessary, as when the plants are shut up tight under the glass, a few minutes of hot sunshine might cause heat enough to destroy them. Placing the hand under the glass will enable any one to judge of the proper temperature, which may be regulated at pleasure by raising or sliding the sash. Cobbett says, "Out of a thousand failures in hot-bed culture, nine hundred and ninety-nine arise from giving too little air." "Changes are very sudden in March, April, and May; and therefore *somebody* should always be at hand to attend to the hot-bed. But if the master be from home, there is surely some man; or at any rate a wife, a son, or a daughter. The labor is nothing, the trouble very little indeed, and all that is wanted is a small portion of *care*."

A bed of the size above stated can be made by a man in less than half a day, and the frame and sash may be made in a day by a common carpenter. The advantages in raising early radishes, lettuces, pepper grass, &c., and starting cabbages, cauliflowers, tomatoes, melons, and sweet potatoes, so as to have them more than a month earlier,—are great when compared with the labor and expense. A farmer should have one, if it be only three feet square, as one even of this

* Unoiled muslin stretched across the frame, will serve as a good substitute for panes of glass.

size would furnish many hundred young plants for the garden.

The manure employed, may be very conveniently spread over the garden on the following spring.

Barn Yard Manure.

The following judicious and seasonable remarks we select from a communication published about a year since, by Gen. R. HARMON of Wheatland in this county. After stating that business had recently called him from home, which had given him an opportunity of observing the manner in which farmers in six of the neighboring towns were managing their farms, he says:—

"I had been of the opinion that most of our farmers had abandoned the practices of the early settlers of this country with regard to the management of barn-yard manure, but my observation convinced me I was mistaken. With the early settlers of this country, manure was thought of little consequence and was rarely used until it had remained in the yard until it was completely rotted, so as to become one uniform mass, but to most of our best farmers of the present day, it is known, that by allowing manure to remain in the yard through the summer, much of its fertilizing property is lost, but notwithstanding this, I did not see one yard after leaving this town, where it had been wholly cleaned out; from some it had been partially removed and lay bleaching in the fields upon the top of the ground, where it was wasting faster than it would had it been ploughed under. Those who would make the most of their manure should have it removed from the yard as early in the spring as the frost will allow of, and have it covered by the spring ploughings, whether it is long or short. Where there has been much straw thrown into the yard which has remained, it is necessary in order to plough it under to have it raked into the furrows by a person following the plough for that purpose; when this is done in the spring it will be found that the straw will have become rotten by fall, and in fine condition for mixing with the soil for wheat crops.

"In this wheat growing district we have large quantities of straw, and to make the best and most profitable use of it must be an object with every farmer. Applying it to the soil as early as possible in the spring, is undoubtedly the most economical. Upon lands to which I applied my coarsest manure, consisting principally of straw, early in May, there may now be seen many of those small plants, generally called toads-stools, which I consider as a sure sign that the fertilizing principle from the manure, is already diffused though the soil. It is to be regretted that there is such a want of correct information, as regards the application or disposal of straw, with many of the farmers in Western New-York; many are in the habit of burning it, others removing it into large piles where it is allowed to remain for years, unsightly and unproductive. Most farmers are still in the habit of removing their manure from their yards to their fields in the fall after the heavy work of the season is over. In this case it is mostly left in heaps upon the top of the ground until spring, where, by the operations of winds and rain, many of the valuable properties are lost, and in addition to the loss of capital for one year, at least one half of the benefits which might have been derived from its use are entirely lost."

Preparation of Seed Corn.

In another article, Gen. H. thus describes the way in which he prepares his Seed Corn for planting:

"I prepared my seed corn by soaking it in water kept blood warm, for sixteen hours. In a sufficient quantity of water to cover sixteen quarts of corn, I dissolved four ounces of salt-peter. After it had remained in it for the above time, I turned off the water and added two quarts of tar, stirred it well, and added four quarts of plaster, then planted it."

Ploughing.

The following remarks on Ploughing are from the same gentleman:

"An agricultural writer on the subject of ploughing says, that the width and depth of the furrows, for general purposes, should be as three to two, or when the furrows are nine inches broad they should be six inches deep, and that where the furrow is cut in this proportion, it will either be turned over, or reclining at an angle of forty-five degrees, and that a field so ploughed will have its ridges longitudinally, or be left in angular ringlets, or drills, but if the furrows, or slices, are much broader, in proportion to their depth, they will be more completely reversed, and the surface left more even, and suitable for after operations. This I believe to be correct, and if the ploughman wishes to plough eight inches deep, the furrows must be twelve inches wide. This is as shallow as our best wheat lands ought to be ploughed, when grass ground is to be broken up. As it is the opinion of many of our best farmers, that one deep ploughing for each crop is better than more, it is important that in that operation the furrows should be laid as flat and even as possible, in order to receive the greatest advantage from the decomposing vegetable matter which was upon the surface. This can only be done with the common ploughs now in use, when there is a strong sward, but when we seed with clover, and plough it up after one or two years, the furrows are but partially recovered, and the land left in a poor condition, unless it is to undergo the usual process of summer fallowing, in which case the soil is rendered fine with as little labor as when turned flat at the first ploughing, but much of the fertilizing property of the sward is lost, being exposed to the action of the sun and air, to the detriment of the cultivator. In all cases, where proper ploughs cannot be obtained for turning the furrows flat, I would recommend the use of a heavy roller, by which many of the furrows which are left partially turned will be pressed down, and the fertilizing properties of the sward more effectually retained in the soil than it would otherwise be.

Monthly Strawberry.

It would seem from the following letter from NOYES DARLING, Esq. of New-Haven, (Conn.) to the Editor of the Baltimore Farmer and Gardener, that he is in possession of a variety of the Monthly Strawberry more valuable than those which are generally distributed about the country:

"My stock originated from *seed* obtained from plants imported from France. I have also some of the French vines, but they are worthless—that is, they are poor bearers. Those from the seed bear very abundantly, unless checked in their growth by severe drouth. In dry weather, therefore, they should be *watered freely*.

"The mode of cultivation, which I have found most successful, is to transplant early in the spring, (every spring,) parting the bunches into as small portions as practicable, leaving a small root upon each portion. A bunch will furnish about twenty roots. These are set, if in a border for edging, six inches apart—if in a bed, ten inches apart. They are hoed sufficiently to keep down the weeds, and require no other care except watering in dry weather.

The soil should be rather poor. A good coat of *fresh horse manure*, containing a good deal of litter, should be dug in, so as to be *buried about five inches under the surface*. Unfermented manure, with a mixture of straw, thus buried, appears to yield the best supply of food in the latter part of the season, when the plants most require it.

The soil of my garden is a light sand. Treated as above described, this strawberry produces more (taking the seasons through) than any other that I am acquainted with."

ERRATA.—Page 73 col. 3, line 23, for *speepily* read *speedily*—page 74, col. 1, line 18 from bottom, for *gulls* read *galls*.

Lime, Ashes & Plaster for Corn.

Our readers will find below an account of a large crop of corn raised by Mr. Semmes, of Maryland, the past season. The whole process pursued in the improvement of this land is not detailed, but we are led to understand, that the great product is in a considerable degree to be ascribed to the use of a mixture of plaster and leached ashes. Having ascertained the beneficial effects of this manure by repeated experiments, we feel ourselves well warranted in recommending the use of it to such of our readers as can procure it. Let leached ashes and plaster be mixed, in the proportion of two bushels of ashes to one of plaster, and let a small handful of the mixture be dropped in each hill of corn, either before or after the corn is dropped, and covered with it, and the effect will be surprising, especially if a few rows are left in the field to which the manure is not applied, the difference will be visible and great throughout the season, and we doubt whether this mode of manuring corn in the hill, is not the cheapest, in proportion to the profit, of any which can be applied. We beg our readers to make the experiment, and satisfy themselves. We have found unleached ashes equally good, when mixed with plaster in the same proportion. We have also found a similar application of slacked lime to each hill, highly advantageous, and would therefore recommend it, especially to those who cannot procure the plaster. The following is the account referred to.

Extract from the Journal of a gentleman who traveled for Agricultural information.

Nov. 1st, 834.—Visited Mr. John Semmes, of St. Mary's county, Maryland, who informs us that his great crop of corn averaged upwards of twenty-five barrels the acre. Respectable judges of the county were appointed to ascertain the quantity of corn, and after having accurately surveyed one acre, the corn was gathered and measured. The farm is uncommonly hilly.

Process.—He prepares his ground by clover, the ground laid off from five by two and a half to three feet. The corn then dropped, three grains in the check, followed by persons who drop on the corn, or even if they are in advance of the corn-droppers, a handful of two-thirds slacked ashes, and one-third plaster, mixed before it is dropped. Should the corn not come up regularly, he drops one or two seeeds more, as may be necessary. He gathers his seed corn from the field before gathering the crop, so as to have a choice of ears. He plants from the 1st to the 10th of April, and ploughs four inches deep.—*Tennessee Farmer.*

A Cheap Green Paint.

Take four pounds of Roman Vitriol, and pour upon it a tea kettle full of boiling water; when the vitriol is dissolved add two pounds of pearl-ash, and stir the mixture well with a stick until the effervescence ceases; then add a quarter of a pound of pulverized yellow arsenic, and stir the whole together. Lay it on with a paint brush, and if the wall has not been painted before, two or three coats will be necessary. If a pea green be required, put in less, and if an apple green more, of the yellow arsenic. The cost of this paint is less than one fourth of oil color, and the beauty far superior.—*Yankee Farmer.*

Starch.

To make Starch from wheat, the grain is steeped in cold water until it becomes soft and yields a milky juice by pressure; it is then put into sacks of linen and pressed in a vat filled with cold water; the pressure should be continued as long as any milky juice exudes; the fluid gradually becomes clear, and a white powder subsides, which is starch.

COMMUNICATIONS.

Trees and Flowering Shrubs.

BY ONTARIO.

There is a propensity in the human mind to set a higher value on articles procured from a distance, and with much trouble and expense, than on those which may be found near home; and perhaps in no instance is this propensity more displayed, than in sending to distant nurseries for fruit trees and flowering shrubs. I plead guilty to this charge myself, and am therefore qualified to give a word of caution to my fellow citizens of Western New York.

Vegetation starts much earlier in the vicinity of New York than with us, and plants should be taken up early in 4th month; but as the Erie Canal is seldom navigable before the 20th of the month, they are not received in this country till the first week in the following month—nearly a month later than would be best. In autumn as great a difficulty presents. Vegetation continues so late on Long Island, that it is not deemed prudent to remove plants much before the beginning of 11th mo.; these are therefore exposed to several severe frosts before they reach us, and when mine arrived last fall, the ground was so frozen that I had to wait several days before it was in a fit state to receive the plants; which could not at that late period extend their roots much, if any. Under such unfavorable circumstances, I much fear that many of them will be found to have perished, by reason of the severity of the past winter.

I believe most, if not all, of the most valuable trees and shrubs, may be found in the nurseries of Rochester, Greece, Lyons and Buffalo, and at as low prices as in New York; and there is this great advantage in getting them near home, besides saving the cost of transportation, that we can select such as are thrifty and of good size, whereas we often receive from distant nurseries, those which are unthrifty and nearly worthless.

As the season of transplanting is approaching, I wish to encourage my brother farmers to procure a few fruit trees of the finest kinds; from these, others may be budded or engrafted; so that in a few years every farmer may have an abundance of the finest fruit, adding greatly to his enjoyments and health. And I would recommend that he add two or three each of Isabella, Catawba, and Muscadine grape vines; if he will not go to this expense, let him beg a few cuttings—mine have produced fruit in two years from the cuttings.

ONTARIO.

Hoven Cattle.

BY O. S.

Having seen the subject of Hoven in horses and cattle mentioned in some of the late numbers of the Farmer, I will give you my mode of treatment, particularly when it has been occasioned by eating too much grain, which is to administer common salt. I had a cow, which by some means found her way on to the barn floor, where there was a quantity of wheat in the chaff, of which she ate so much that when I found her in the morning she was very much swolen, perfectly dry at the nose, and stood without attempting to chew her cud. I took about a half pint of common salt, put as much water to it as would enable me to put it into a black or junk bottle, when I had the cow's head raised, and her tongue drawn out by taking hold of it with the hand. I then introduced the neck of the bottle containing the salt and water, and which in this way was forced down her throat. After this, I had the cow moderately drove about the yard. After a short time she began to purge, and continued to do so until she was reduced to her proper size, and from appearances quite disgorged of the wheat she had eaten.

The person from whom I got my information, has been engaged in business in which he employed many horses, and was in the habit of dealing considerably in them. His constant practice was, when he found that a horse had by any accident got at and eaten too much grain, to administer salt in the way above stated, and with uniform success.

O. S.

Wheat Crops on the Genesee.

BY MONROE FARMER.

MR. TUCKER—In the Genesee Farmer of the 28th February, you request that some of the wheat growing farmers in Western New York would give a statement of their annual average crops. Having the means of doing so, I cheerfully comply.

A few years ago, I had my farm accurately surveyed, and a map made, with the exact quantity of ground in each field marked upon it. I also have a journal in which I keep an account of all my farming operations. My wheat is all weighed, or accurately measured, and regularly entered in my journal, so that I can state with accuracy the annual average per acre for each year, and the condition of the ground on which it was raised. I also count the stooks in each field, which enables me to know very near the average per acre in each one.

In 1834, I harvested 52 acres of wheat, 23 acres of which was summer fallow—17 clover meadow, once ploughed—8 acres, corn stubble, once ploughed, and 4 acres barley stubble, twice ploughed. The produce was 1537 bushels, and 40 lbs., average 29 bushels, 34 lbs per acre on the whole. The barley and corn stubble was 25 bushels per acre—the clover meadow 20 bushels per acre, (the soil was too stiff for ploughing sufficiently to pulverise)—the summer fallow was 43 bushels per acre.

In 1833, harvested 43 acres, viz:—20 of fallow—11 barley stubble—8 corn, and 4 oats stubble, and had 1,671 bushels, 16 lbs. of wheat—average 38 bushels 52 lbs. per acre, viz:—Oat and corn ground, 28 bushels per acre—fallow 42 bushels per acre, and barley stubble 45 bushels per acre. The ground was in high order, being heavily manured previous to sowing the barley, and 1833 was a very remarkable season for heavy crops of wheat.

In 1832, harvested 42 acres, viz:—15 fallow, 15 barly stubble, 10 of corn, and 2 potatoe ground, and had 1,166 bushels, 15 lbs. of wheat—average 27 bushels 46 lbs. per acre. I neglected counting the stooks, so that I cannot state the average per acre in each field.

In 1831, my crop was very light, being much damaged by the Hessian fly. I harvested 52 acres, viz:—23 fallow, 19 corn and barley stubble, and 10 of clover meadow, once ploughed, and had only 820 bushels, 30 lbs. of wheat. The corn and barley stubble was the White Flint, and a very good crop, viz:—26 bushels per acre—it received very little injury from the fly. The fallow and clover meadow was the Red Chaff, in good condition, and had the appearance in spring of being a very heavy crop, but was so much destroyed by the fly that it did not yield 10 bushels per acre.

I might give a statement of several years more, but I fear I have already become tedious; and as I am not so much accustomed to writing as to holding the plough, cannot do it so well nor near so easily. Yours sincerely,

MONROE FARMER.

Cultivation of Hemp.

BY A FARMER.

MR. TUCKER—Confinement by illness gives me leisure to contribute a few lines for the Farmer, on a branch which is of growing importance to my immediate neighborhood.

The raising of Hemp on the Flats was much attended to during the last war. I am told, for I was not then in this country, that it was considered the most profitable employment of the land, notwithstanding they had to send the hemp, when prepared, to Albany for a market. The price was then $200 per ton, and the cost of carriage in wagons $80 per ton. The whole was prepared without any other machinery than the common brake, &c. After the peace took place, the price would no longer bear such heavy expense of carriage, and the culture was relinquished. About two years ago, the gentleman whose enterprising spirit has done so much for the village of Mount Morris and its neighborhood, determined to erect machinery on an extensive scale for the preparation of hemp. He has just completed it, and it appears to be very effective. The breaking machine was made by the patentees at Copenhagen, in the north part of this state. It consists of a number of fluted rollers in two rows. The hemp is fed into the machine just as in threshing wheat, but of course in much less quantity at a time; and after passing between all the rollers is delivered at the other end on a revolving apron, as in a printing machine, where a man stands to remove it. After this, it is cleansed from the remaining woody particles by the action of powerful beaters—the whole impelled by water. It is previously rotted in a vat about 200 feet long, by 14 feet wide, which, after being filled with sheaves of dry hemp, receives the water from a force pump. A drying house and barn completes the list of buildings.

The same machinery has been for some time in operation at Copenhagen, where, I understand, each breaking machine prepares 500 lbs. clean hemp per day.

The farmer has hitherto received $12 per ton for the dry hemp in sheaves, delivered at the factory. This year, the contracts are at $10 per ton for the ensuing crop. Even at that price it pays us better than any thing else. Our best Flats give us from three to four tons per acre. Hemp leaves the ground in so fine and clean condition, that after the first crop the cost of tillage is very light. It requires 2¼ to 2½ bushels seed per acre, which is an expensive item, as it cannot, I think,

be raised, to pay a fair profit, under $1,50 per bushel. Harvesting is also expensive—$3 per acre, besides board.

The profit of the manufacturer must be liberal. Six tons of sheaves yield one ton clean hemp. The price of Russia hemp by the last N. York price current is $175 per ton. The hemp prepared at Copenhagen is, I am told, considered quite equal to the Russian.

Your ob't serv't, A FARMER.

Groveland, Feb. 11, 1835.

Selection of Vegetables.

BY WM. PRINCE & SONS.

MR. L. TUCKER—We have been repeatedly asked to designate the finest varieties of vegetables, and we now enumerate some of the most desirable, and will do so with regard to others at a future opportunity.

Yours very respectfully,

WM. PRINCE & SONS.

Linnæan Botanic Garden, near N. Y., March 7, 1835.

BEET—Long Blood, Early Turnep Blood, Early Yellow Turnep, Early White Sugar.

BROCOLI—Grange's Cape, Sulphur Colored, Purple Cape, and New Imperial Late Dwarf White.

CAULIFLOWER—Early, and Half Hardy.

CABBAGE—Earliest French, Early York, Early Royal Dwarf, Large York, French Oxheart, Early Emperor, Bonneuil, Harvest Battersea, Large Late Bergen, Early Savoy, Cape Savoy, Monstrous French Savoy, Large Pancalier Savoy, the latter *extra fine* and far surpassing the kinds of Savoy usually cultivated.

CARROT—Early Scarlet Horn, Altringham, Long Red Studley, and Large White.

CELERY—Turkish Large White Solid, North's Giant Red, Dwarf Curled.

CUCUMBER—Early Long Frame, Long Green Prickly, Long Green Turkey, Early Green Cluster, and Long Green Southgate, for table, the latter longest of all; and the Small Green and Gherkin for pickles.

ENDIVE—Italian Green Curled, and White Batavian.

INDIAN CORN—Early White Tuscarora, and Sweet or Sugar.

LETTUCE—Early Curled Silesia, Large Early White French, Versailles, Turkish, and Red Edged Early White, as Head or Cabbage Lettuces for spring and summer sowing; and Florence Coss, Magnum Bonum Coss, and Monstrous Coss, for loose, or less solid heads. The Coss Lettuces are deemed sweeter and more tender than the Cabbage varieties.

ONION—Early Silver Skinned and Pale Red Madeira, are earliest of all, and sure to attain their size the first season. The Yellow Dutch, not quite as early, but produces very large onions the first season.

MELON—Pine Apple, Persian, Citron, Skillman's Netted, Minorca, Netted Romana, French Muscade, Malta Winter, all of which are green fleshed. The Cohansa, Imperial, Cyprian, Green Fleshed Sugar, Large Yellow Cantaloup, and other Cantaloup varieties are also valuable.

PEAS—Six Weeks, Washington, Dwarf Blue Imperial, Dwarf Green Marrow, Knight's Marrow, Woodford's Marrow, and various others.

PUMPKIN—Spanish Cheese, Yellow Cheese, &c.

RADISH—Earliest French Scarlet, very tender and earliest of all, Mason's Scarlet Short Top, Salmon, and White Naples, as long varieties. The Scarlet, Violet and White Turnep varieties are best for early sowing, and the Yellow Turnep and Spanish varieties for hot seasons, or for tropical climates.

SQUASH—Summer Bush, Summer Crookneck Bush, Vegetable Marrow, and Italian, for early; White Canada, Yellow Fall Crookneck, for autumn; and Teneriffe, Acorn, and Cocoanut, for winter.

TURNEP—Early White, and Early Yellow Dutch, White Stone, Yellow Stone, &c., for spring sowing as garden varieties.

Cultivation of the Honey Bee.

BY LEVI H. PARISH.

MR. TUCKER—In a late number of the Genesee Farmer, is an article copied from the United States Gazette, stating that T. G. Henderson, of Piquea, Lancaster county, took from a single hive of bees 136 lbs. of honey, the produce of a single season. As the honey was all taken from the hive it is presumed the bees were destroyed by suffocation or otherwise.

On reading a statement like this, the question immediately presents itself—"Is it the part of wisdom to destroy a species of property so vastly productive?"—One hundred and thirty six pounds of such honey, which the writer says was "the whitest and most delicious honey I ever laid my eyes on," would have been worth in the market of Philadelphia probably 18¾ cts. per lb., which would amount to $25,50. Now suppose the bees, when put into the hive last June, to have been worth $5,00—they must have yielded a clear profit in their stock of honey of more than five hundred per cent.—and it is presumed the increase of such a swarm during the season would have been worth at least the wintering of the whole swarm.

As it is often said that ten or twelve pounds of honey are sufficient to winter an ordinary swarm, let us suppose the owner of those bees had kept them through the winter, and in a hive so constructed that the honey might have been taken from them in the spring without destroying the bees. Suppose we allow 24 lbs. for wintering so large a swarm as this must have been, with its increase, then the owner might still have realized the amount of 112 los. of honey in the spring, worth twenty one dollars, and had as many as two good swarms on hand for another year. Is it unreasonable to suppose that this swarm, with its increased numbers, would have laid in twice the amount of honey the next year that they did the first, having the whole season to work in, from March or April instead of June? If so, they would have stored more than 270 lbs. worth more than fifty dollars. All this last calculation, however, with those of every succeeding year, are lost by means of destroying the original swarm; but it is sufficient to show the importance of preserving our bees instead of resorting to the barbarous custom of destroying them.

But why are we so neglectful about cultivating the honey bee? Is it an object of so small consequence as not to be deserving our attention? I think a little reflection on the subject would satisfy us that it might be an object of great importance.

Mr. Butler in his Treatise on Bees, says,—"It is a notorious fact that England pays annually to the north of Germany 40 or £50,000 sterling for the produce of the bee, which could be saved by a small expense by her own peasantry. Even in America, we are so regardless of the bee, as to import honey in hogsheads from the Island of Cuba and elsewhere. No country possesses greater advantages for the culture of the bee, and perhaps no country has so grossly neglected it."

Mr. Huish says—"The profit which is obtained from the bee stands in no proportion to the little trouble and time required in their culture, and this is sufficient to induce those who estimate things properly, to give a preference to the culture of the bee, *above all other agricultural pursuits*, especially as no sacrifices of time or property are required, and no extensive capital necessary. As a proof of the importance attached to the culture of the bee, Wildman quotes a modern author, who affirms, "that when the Romans took possession of the Island of Corsica, they imposed a tribute of wax on the inhabitants, to the amount of 200,000 pounds annually; supposing the Island retained the same quantity, that would give 400,000 pounds per annum made in one Island by this wonderful insect. The known proportion of wax to honey in a hive, is as one to fifteen or twenty,—then multiply 400,000 pounds by 15 or 20, we have six or eight millions of pounds of honey, independent of the wax as above; what a source of wealth for Corsica, and all countries which will profit by the improvement." Mr. Butler again says—"Since it is so well known that bees afford such immense profit to cultivators, with so little expense and trouble, and without the least injury to the most delicate parts of the vegetable kingdom, it must be owing to a want of knowledge, or a want of attention, that America derives so little share from the profits of this wonderful insect."

Among the people of many countries, as the Chinese, Egyptians, French, Italians and Germans, the cultivation of bees is deemed an object of sufficient importance for those living in the vicinity of navigable rivers or canals to transport them from place to place, often hundreds of miles distant, for the purpose of procuring fresh pasturage for them—while we in America, who happen to have a swarm of bees, generally turn them off, to provide for themselves, paying little or no attention to them;—and if by chance they increase to two or three swarms, we are sure to "take up,"—that is, kill off,—one or more swarms to get their honey. Thus we not only fail to promote, but actually retard the increase of bees in this country, by our slovenly and inhuman treatment of them.

With this number of the Genesee Farmer I send the Editor of the United States Gazette a description of a hive recently invented, and for which I have obtained a patent, by which he will see that bees may be safely kept in the house; and by a little attention, perfectly secure from all their numerous enemies—that any portion or all their honey may be taken from them at any time without destroying the bees, and that by this mode of treatment a species of property may be preserved in perpetuity whose untiring industry procures us one of the richest luxuries in nature, and whose death profits us nothing.

The Editor of the United States Gazette will be so good as to accept the use of it for himself, and get one into his dwelling house the coming season, as he will see they may as well be kept in this way in the heart of his beautiful city, as in the county of Lancaster or elsewhere.

Yours, &c. LEVI H. PARISH.

Brighton, Mon. co., N. Y., March 12, 1835.

On Draught.--No. VII.

BY QUERCUS.

Before proceeding to the consideration of the different forms of wheels, it may be well to describe definitely their various parts.

A wheel, as I shall consider it, is composed of a strong circular frame of wood, of different segments, called felloes, which are bound together by a hoop or hoops of iron called tires, and which gives the whole great strength and protects the outer surface from wear.

This circular frame is sustained by means of spokes passing from the inner periphery to a nave or hub in the center, through which passes the axle. It will readily be perceived, that in the construction of wheels, all these different parts may be preserved, and yet a great diversity of form, exist.

The most simple form is where the frame, spokes and center of the hub when standing on the tire, are perpendicular to the ground. This is the usual form of our common ox cart wheels. But it is easy to see, that when a wheel of this kind is made light, a small pressure on either side of the hub would have a tendency to push it through; and to obviate this difficulty, they were made dishing, or in other words, the spokes ran in a conical direction from the frame to the nave.

This dishing formed a kind of arch, and gave the wheel great stiffness and strength in resisting lateral pressure. But in consequence of this conical form, it became necessary to place the wheel obliquely, and bend the axle downward, so that the spokes which support the weight, should be vertical. This form is in constant use among all our stage proprietors and wagoners, and generally prevalent throughout our country. But if the least friction is produced, when the axle runs horizontal to the hub, the spokes and the frame, it is easy to see, that this bending of the axle and inclination of the frame will greatly increase the resistance, and especially when the roads are not smooth and hard.

But a form still more absurd, was at one time in very general use in England, and partially in this country. To avoid the cutting and grinding of the roads by these narrow conical wheels, the wagoners preserved the dishing principle, widened the tires, and cut down the outer periphery, so as to make the tire of the wheel the section of a cone. This brought the lower surface of the wheel, apparently flat upon the ground, but in reality when in motion, ground and tore up the roads in a shocking manner. The constant tendency of such wheels was to twist outward, as may be readily seen by rolling a conical tumbler across a table, and consequently the friction at the axle and the resistance from the ground, caused a monstrous waste of power.

It may be doubted whether the widening of the tires is advantageous under any circumstances, for as all roads consist of a hard bottom, covered with a stratum more or less thick, of yielding matter, and as the crushing or displacement of this matter forms a principal cause of resistance, the wider the tire, the more it will crush or displace, and of course the greater the resistance; and if the road is perfectly hard then certainly the narrower the tire, consistent with strength, the better.

There can be no doubt, that the cylindrical form is the only one which ought to be admitted and the more horizontally the weight rests upon the nave and the spokes, the better. To preserve the strength of the wheel, and to obviate the foregoing difficulties, a wheel has been constructed in England which seems to combine more advantages than any other now in use. It consists in making the felloes of a single ring of cast iron. The nave which is also of cast iron, is suspended in the center, by eight wrought iron spokes; these spokes are crossed or alternately dished inwards and outwards, to give stiffness, without effecting the cylindrical form. It is supposed that six inches width of tire is quite sufficient, to bear a ton weight without injury to roads of ordinary condition, and where more or less weight is to be sustained, a correspondent increase or decrease of strength must be given to the wheel.

A great variety of hubs have also been in use, but as I do not pretend to be a wheel wright, I shall leave the craft, to direct as to their proper form.

With respect to the size of the wheel, a great diversity of opinion has existed. One thing is however certain, that wheels of a large diameter offer less resistance than smaller ones; but weight and expense must of course cause a limit to their usefulness. Small wheels are in general use, for the front of wagons and coaches and the increase of draught occasioned by thin tire seems to be compensated by their increased facility of turning. The use of large or small wheels therefore, every man must determine for himself, according to his circumstances and necessities.

The comparative advantage or disadvantage of two and four wheeled vehicles, is also a mooted point. It is contended on the one part, that a horse working alone in a two wheeled cart can perform more work by one third, than when forming one of a team; and that thus the horse can produce more effect inasmuch as the wheels are larger, and his force applied more directly to the load. On the contrary it is asserted, that it requires that each horse in a single cart should be of a superior quality to those working in a team, and that the wear and tear and attendance of several small carts, are so much greater than of a wagon carrying the same load, that economy is vastly in favor of double wagons. A variety of other reasons are offered on both sides, which seem to be nearly balanced, so that I am willing to leave the matter where I found it, to be determined by every one's own experience.

But there is another cause, which seriously effects the draught of vehicles and which requires some special notice, to wit, the arrangement of the load upon the wheels. This of course embraces the loading of wagons and carts and the hanging of carriage bodies.

In one of my former numbers, I established the point, that the nearer the load was brought to the horse, the less would be the draught, and that a yielding or elastic load in the direction of the draught, greatly increased the force of traction required. Now in application of this principle, it is all important that the loading should be so arranged both in two and four wheeled vehicles, that the power of the horse can be applied directly to the load, and that the load should never be allowed to move or spring longitudinally, or in the direction of the movement. To illustrate the latter principle, it is only necessary to suppose a load so hung upon the wheels, as to allow a free and elastic action in the direction of the movement, or in other words to swing backwards and forwards; if then the wheels, when in motion, meet a stone, the whole carriage may be stopped, by spending its acquired impetus, in swinging the load forward; while this same load, if fixed firmly to the wheel would by the same impetus have forced the wheel over the stone with very little loss of velocity. In the first case, it would be necessary for horses to drag the load over the stone by main force; in the latter, they would only exert sufficient strength to make up the loss of velocity in striking the stone. This principle is clearly illustrated in the operation of *C.* springs, where the body of the carriage or load, swings longitudinally. These are proverbially hard running carriages, and every hostler and coachman knows that they require almost double the power to propel them, that other spring carriages do. Our modern stage coaches are also partially upon the same principle, and though they are easy to the passenger, yet so far as they are permitted to yield backward and forward, create a great loss of power.

But while longitudinal elasticity increases the draught, elasticity in every other direction tends directly to diminish it. Let us suppose the load placed upon perfectly easy springs, which allow it to move freely in every direction, except longitudinally; when any one of the wheels comes in contact with a stone, the elasticity of the spring will allow it to run over the stone without sensibly raising the load which is upon it, and the force which is required to pull the wheel over the stone, will be restored again by the descent of the wheel from the stone, which will tend to impel the mass forward with exactly the same force as was required to draw it up to the top of this impediment; without this elasticity it would be necessary to raise the whole load with a sudden jerk, and thus instantaneously impart rapid movement to the whole mass, which would absorb much power, and which would by no means be returned by the load falling down from the stone. We see, therefore, that the use of springs is to enable the wheels to rise and fall according to the inequalities of the ground, while the load continues one constant equable motion.

It is upon this principle that coaches *loaded high*, run easier than what used to be called *safety coaches*, for in the one case, the weight being so far above the wheels is not easily displaced by a sudden jolt, and therefore acts as a long spring; while in the other case the load acts directly upon every little impediment in the road, and consequently feels their resistance. The advantage of placing the load high will not however, equally apply at low velocities, and still less when springs are not used.

Thus it appears, that there should be a firm unyielding connection in the direction of the movement between the power employed, the weight moved and the wheels; in other words, that the force should always act directly and without elasticity both upon the load and upon the wheels; and that the impetus or momentum of the load, when in movement should always act in the same manner, without elasticity in propelling wheels; and lastly, that it is highly advantageous to interpose as much elasticity as pos-

sible by means of springs in a vertical direction, between the wheels and the body, so that the former may rise and fall over stones or irregularities in the road without communicating any sudden shocks to the load; and that the proper application of springs in all cases, even with the heaviest loads, will be found productive of equal good effect.

Here I shall close my observations on the subject of draught. Much more might be said in relation to the form and materials of *Roads*, but I have already occupied more room than I intended, and this latter subject has heretofore been pretty largely discussed in vol. 4, by "Viator."

In conclusion, I would barely remark, that in giving this subject what little interest it may have possessed, I have drawn in part from the resources of several foreign works, and from none more than the 'Farmer's Series of Useful Knowledge.' I would again commend that work to the careful perusal of every practical farmer.

QUERCUS.

Destruction of Canada Thistles.

BY H. W.

MR. TUCKER—Having read with much interest the many articles which have been written for the Genesee Farmer, and particularly those on the Canada Thistle, and having seen the subject lately taken up by D. BRADLEY, Esq, I think it the duty of every farmer having any experience in their destruction to make it public. I therefore feel a disposition to give a few hints with regard to them.

Although there are many very plausible methods laid down for their destruction, such as mowing them off on a particular day of the year, putting brine on them, sowing some kinds of grain on them, and perhaps many other methods similar to the above, they most all seem to be like old dogmas with regard to the influence of the moon, or the observation of a particular day of the month as an index of the weather for the following month, both of which may sometimes have happened as foretold very nearly—but it might have been the particular state of the thistle, together with the means used, which caused the death of the plant. If we could always attack the thistle when in the same state, and have the same weather to assist, we should have few thistles in this part of the state. Mowing thistles does not tend to destroy them unless cut in that exact state, except that they do not propagate by their seeds if cut previous to seeding. The most reasonable manner for their extermination which I have noticed, was given by Mr. THOMAS TUFTS, in vol. 3, No. 9, of the Genesee Farmer, and in vol. 4, Nos. 3 and 4, by *A Subscriber*. Those communications ought to have an attentive perusal. The first, because it will exterminate them on summer fallows; and the other, because it will destroy them on land designed for corn.

But let the farmer beware of a heedless regard for the rules laid down, lest he propagate them by their side shoots, and say I have tried them in vain, and finally give up the idea that they can be killed; but let his motto be "perseverance," and I think he will completely destroy his enemy.

The subject is and has been attracting the attention of some very distinguished agriculturists and some of them have suggested forcible means to be used for their destruction, or for checking the spread of them, made legal by the Legislature, to which there can be no objections, except by men who have no interest for the public welfare—but if nothing more can be done, I hope ere long to see the plan recommended by Mr. Bradley in effective operation (that of neighborhood associations.)

I will now give my experience in the destruction of the Canada thistle, and for which I am in part indebted to Mr. Tufts' communication. I adopted his plan on a summer fallow—the ground the previous year was in corn. I ploughed it as well as I could, although all the thistles were not cut off the first time owing to the hardness of the land. The three successive ploughings were done in the best manner. There was more than an acre of thick set thistles on seven of the fallow, and they had attained considerable growth before ploughing; and before the snow came on the ground, there was but now and then a scattering thistle to be seen, and they appeared sickly. I will here remark that I was not particular as to the state of the *moon* at the time of ploughing.

About the first of July last, I scattered some salt very thick on a small patch of thistles, which were about three feet high,—at the time in the morning there was a heavy dew before sunrise. About two hours after, the thistles had dropped their heads—they withered away, and now no thistles are to be found on the patch. In September the roots of some were pulled, which came out dead a foot below the surface, I think they can be destroyed by either course if thoroughly attended to, but salt must not be spared nor care in ploughing.

H. W.

Camillus, March 14, 1835.

☞ List of payments next week.

Albany Seed Store and Horticultural Repository.

THE subscriber is now enabled to furnish traders and others with fresh GARDEN SEEDS, upon very favorable terms, growth of 1834, warranted of the best quality.

The utmost care and attention has been bestowed upon the growing and saving of Seeds, and none will be sold at this establishment excepting those raised expressly for it, and by experienced seedsmen; and those kinds imported which cannot be raised to perfection in this country; these are from the best houses in Europe, and may be relied upon as genuine.

It is earnestly requested whenever there are any failures hereafter, they should be represented to the subscriber; not that it is possible to obviate unfavorable seasons and circumstances, but that satisfaction may be rendered, and perfection approximated.

Orders will be punctually attended to, and carefully packed and forwarded as directed. But as the collection of distant debts is often troublesome, and sometimes impracticable, it is desired that satisfactory references be made to persons in Albany, when the order is not accompanied with the money.

Also, French Lucerne, White Dutch Clover, White Mulberry Seed, genuine Mangel Wurtzel, Yellow Locust, Ruta Baga and field Turnep Seeds, well worthy the attention of Farmers.

W. THORBURN,
No. 347 N. Market-st. opposite Post Office.

Garden Seeds.

SEVERAL hundred pounds fresh Garden Seeds, of the greatest variety, lately received from William Prince & Sons, Flushing, Long Island, many of which were lately imported from different parts of Europe, for sale by the subscribers, wholesale and retail.

A. & J. BOSTWICK.
Auburn, March 17, 1835. mar 19-3t

More New and Valuable Seeds.

JUST received at the "Rochester Seed Store," in addition to the former assortment, many choice kinds of seeds, including new White Italian Mulberry, Dyer's Madder, and Dale's New Hybrid Turnep. Also, a few quarts of the new and celebrated Skinless Oats, Bonavista Beans, Early Golden Sioux Corn, &c.; together with some hundred varieties of *Flower Seeds*, which will be put up in small papers at 6*d*. each, or 20 varieties for $1, and 100 varieties for $4. When the selection is left to the proprietors, care will be taken to select such as will form a pleasing assortment as to color, time of flowering, &c.

REYNOLDS & BATEHAM.

A large and comprehensive Catalogue of the Establishment is just published, and will be furnished gratis on application. mar 19

Superior Onion Seed.

THE subscriber offers for sale 1500 lbs superior quality RED ONION SEED, American growth, crop of 1834, heavy fine seed—price 75 cents per pound by the 50 lbs. or more—cash. Also, 500 lbs. Yellow Onion seed—$1. 200 lbs. Large Silver White do.—$1,50. Received by late arrivals from England, France and Holland, a large collection of Early and Late Cabbage seeds; Cauliflower; Brocoli; Mangel Wurzel; White Dutch Clover; Lucerne; Trifolium incarnatum, &c. Also, the best collection of *warranted* Garden Seeds to be found in America. Those who purchase to sell again supplied on accommodating terms. Price currents furnished on application.

GEO. C. THORBURN, *Seedsman*,
March, 1835. 67 Liberty-st., N. York.

Just received from London, 1000 superb Dahlias, which can be sent in April—a separate catalogue of all the fine new varieties can be furnished—among them is the celebrated "*Queen of Dahlias*," which attracted so much attention at the exhibition in this city last autumn. It is pure white, with cupped petals beautifully edged with lilac—grows but four feet high, and flowers in profusion. It is beyond question the finest Dahlia ever raised in England. Plants of this choice variety will be ready for delivery in pots on the 1st of May, at $2 each. mar 14-3t

Monroe Horticultural Garden & Nursery.

THE subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, &c. &c.

ALSO—A few hundred of the Morus Multicaulis, or Chinese Mulberry, the White Italian Mulberry by the hunbred or thousand, Grape Vines of both native and foreign varieties, mosty of large size, for sale by the single vine, hundred or thousand, at reduced prices. The subscriber has a large collection of Green-House Plants of choice and select varieties, and in good condition.

☞ Orders for Mr. Rowe's Nursery received by the Publisher of this paper.

Catalogues will be sent to those who wish them, gratis, or may be had by calling at the office of the Genesee Farmer. ASA ROWE.

Greece, Monroe co. N. Y. Sept. 13, 1834.

Rochester Seed Store & Horticultural Repository.

No. 5 Arcade Hall, next door but one to the Post-Office.

REYNOLDS & BATEHAM, having completed their assortment, now offer to the public the best and most extensive collection of Garden, Field and Flower Seeds, ever before offered in the Western country.

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Culture of Hemp.

BY HON. HENRY CLAY.

To the Editor of the Western Agriculturist—Having promised you some account of the method of cultivating and preparing hemp in this state, I now proceed to redeem it. I shall endeavor to describe the general practice of the cultivators, without noticing all the deviations of particular individuals.

The district of country in which the plant is most extensively cultivated, is the Elkhorn region around and near Lexington, which derives its name from a stream discharging itself into the Kentucky river, whose branches are supposed to resemble the horns of the elk. It is also produced in considerable quantities in the counties of Jefferson, Shelby, Mercer, Madison, Clarke, Bourbon and Mason. The soil of that region is a rich, deep vegetable loam, free from sand and with but little grit. It lies upon a bed of clay, interspersed with small fragments of iron ore, and this clay in its turn reposes on a mass of limestone lying many feet in depth in horizontal strata. The surface of the country is generally undulating. The rich land, (and there is but little that is not rich,) in this whole region, is well adapted to the growth of hemp, where it has not been too much exhausted by injudicious tillage. The lands which produce it best, are those which are fresh, or which have lain some time in grass or clover. Manuring is not yet much practiced. Clover is used in lieu of it. Lands which remain in clover four or five years without being too constantly and closely grazed, recover their virgin fertility. The character of the soil in the other counties above mentioned, does not vary materially from that in the Elkhorn district.

The preparation of the ground, for sowing the seed, is by the plough and horses, until the clods are sufficiently pulverized or dissolved, and the surface of the field is rendered even and smooth. It should be as carefully prepared as if it were for flax. This most important point, too often neglected, cannot be attended to too much. Scarcely any other crop better rewards diligence and careful husbandry. Fall or winter ploughing is practiced with advantage—it is indispensable in old meadows, or old pasture grounds intended for producing hemp.

Plants for seed are ordinarily reared in a place distinct from that in which they are cultivated for the lint. In this respect, the usage is different from that which is understood to prevail in Europe. The seeds which are intended to reproduce seeds for the crop of the next year, are sowed in drills about four feet apart. When they are grown sufficiently to distinguish between the male and female stalks, the former are pulled and thrown away, and the latter are thinned, leaving the stalks separated seven or eight inches from each other. This operation is usually performed in the blooming season, when the sexual character of the plants is easily discernible; the male alone blossoming, and, when agitated, throwing off farina, a yellow dust or flour which falls and colors the ground, or any object that comes in contact with it. A few of the male plants had better be left, scattered through the drill, until the farina is completely discharged, for an obvious reason. Between the drills a plough is run sufficiently often to keep the ground free from weeds and grass; and between the stalks in each drill the hoe is employed for the same object. The seed plants are generally cut after the first smart frost, between the 25th September and the middle of October, and carried to a barn or stack-yard, where the seeds are easily detached by the common thrail. They should be gathered after a slight, but before a severe frost; and, as they fall out very easily, it is advisable to haul the plants on a sled, and, if convenient, when they are wet. If transported on a cart or wagon, a sheet should be spread to catch the seed as they shatter out. After the seeds are separated, the stalks which bore them being too large, coarse and harsh to produce lint, are usually thrown away: they may be profitably employed in making charcoal for the use of powder mills. In Europe, where the male and female plants are promiscuously grown together in the same field, both for seeds and for lint, the male stalks are first gathered, and the female suffered to remain growing until the seeds are ripe, when they are also gathered, the seed secured and lint obtained, after the rotting, from both descriptions.

After the seeds are threshed out, it is advisable to spread them on a floor to cure properly and prevent their rotting, before they are finally put away for use the next spring. Seeds are not generally used, unless they were secured the fall previous to their being sown, as it is believed they will not vegetate, if older; but it has been ascertained that when they are properly cured and kept dry, they will come up after the first year. It is important to prevent them from heating, which destroys the vegetating property, and for that purpose they should be thinly spread on a sheltered floor.

The seeds—whether to reproduce seeds only, or the lint—are sowed about the same time. Opinions vary as to the best period. It depends a good deal upon the season. The plant is very tender when it first shoots up, and is affected by frost. Some have sowed as early as the first of April; but it is generally agreed, that all the month of May, and about the 10th of it especially, is the most favorable time. An experienced and successful hemp-grower, in the neighborhood of Lexington, being asked the best time to sow hemp, answered, immediately before a rain. And undoubtedly it is very fortunate to have a moderate rain directly after sowing.*

When the object is to make a crop of hemp, the seeds are sown broad-cast. The usual quantity is a bushel and a half to the acre; but here again the farmers differ, some using two bushels, or even two and a half. Much depends on the strength and fertility of the soil, and the care with which it has been prepared, as well as the season. To these causes may be ascribed the diversity of opinion and practice. The ground can only sustain and nourish a certain quantity of plants; and if that limit be passed, the surplus will be smothered in the growth. When the seeds are sown, they are ploughed or harrowed in; ploughing is best in old ground as it avoids the injurious effect of a beating rain, and the consequent baking of the earth. It would be also beneficial, subsequently to roll the ground with a heavy roller.

After the seeds are sown, the labors of the cultivator are suspended, until the plants are ripe, and in a state to be gathered—every thing in the intermediate time being left to the operations of nature. If the season be favorable until the plants are sufficiently high to shade the ground, (which they will do in a few weeks, at six or eight inches height,) there is strong probability of a good crop. When they attain that height, but few articles sustain the effect of bad seasons better than hemp.

It is generally ripe and ready to be gathered about the middle of August, varying according to the time of sowing. Some sow at different periods, in order that the crop may not all ripen at the same time, and that a press of labor, in rearing it, may be thus avoided. The maturity of the plant is determined, by the evaporation of the farina, already noticed, and the leaves of the plant exhibiting a yellowish hue: it is then generally supposed to be ripe, but it is safest to wait a few days longer. Very little attentive observation will enable any one to judge when it is fully ripe. In that respect it is a very accommodating crop: for if gathered a little too soon the lint is not materially injured, and it will wait the leisure of the farmer some ten days or a fortnight after it is entirely ripe.

Two modes of gathering the plants are practiced, one by pulling them up by the roots, an easy operation with an able bodied man, and the other by cutting them about two inches (the nearer the better) above the surface of the ground. Each mode has its partisans, and I have pursued both. From a quarter to a third of an acre, is the common task of an average laborer, whether the one or the other mode is practiced. The objections to pulling are, that the plants with their roots remaining connected with them, are not afterwards so easily handled in the several operations which they must undergo; that all parts of the plant do not rot equally and alike when exposed to the dew and rain; and, finally, that before you put them to the brake, when the root should be separated from the stalk, the root drags off with it some of the lint. The objection to cutting is, that you lose two or three inches of the best part of the plant nearest the root. Pulling, being the most ancient method, is most generally practiced. I prefer, upon the whole, cutting—and I believe the number who prefer it is yearly increasing. When pulled, it is done with the hand, which is better for the protection of an old leather glove. The laborer catches twenty or thirty plants together, with both hands, and by a sudden jerk draws them without much difficulty. The operation of cutting is performed with a knife, often made out of an old scythe, resembling a sickle, though not so long, but broader. This knife is applied much in the same way as the sickle, except that the laborer stoops more.

Whether pulled or cut, the plants are carefully laid on the ground, the evener the better, to cure—which they do in two or three days, in dry weather. A light rain falling on them while lying down is thought by some to be beneficial, inasmuch as the leaves, of which they should be deprived, may be easier shaken off or detached. When cured, the plants are set up in the field in which they were produced, in shocks of convenient size, the roots or butt ends resting on the ground, and the tops united above by a band made of the plants themselves. Previous to putting them up in shocks, most cultivators tie the plants in small hand bundles of such a size as that each can be conveniently held in one hand. Before the shocks are formed, the leaves of the plants should be rapidly knocked off with a rough paddle or hooked stick. Some suffer the plants to remain in these shocks until the plants are spread down to be rotted. Others, again, collect the shocks together as soon as they can command leisure, (and it is clearly best,) and form them into stacks. A few farmers permit these stacks to remain over a whole year, before the plants are exposed to be rotted. I have frequently done it with advantage, and have at this time two crops in stalks. By remaining that period in stalks, the plants go through a sweat, or some other process that improves very much the appearance, and, I believe, the quality of the lint, and this improvement fully compensates the loss of time in bringing it to market. The lint has a soft texture and a lively hue, resembling water rotted hemp; and I once sold a box of it in the Baltimore market at the price of Russia hemp. In every other respect, the plants are treated as if they were not kept over a year.

(*Concluded next week.*)

[* Would it not be well to soak the seed in water a few hours previous to sowing? We have found this to answer nearly as good a purpose as rain after sowing, with all seeds with which we have tried it. The vegetation of mangel wurzel is wonderfully accelerated by it.—*Ed. Am. Far.*

Water Proof Varnish.

It simply consists of Seneca oil and gum elastic; one ounce of the latter to be cut into thin shreds and dissolved in a pint of the former, and when dissolved, which will be in a few days, the boots are to be completely saturated or charged with the mixture. The manner in which I have prepared my boots is as follows: I take a piece of sponge, and rub the mixture in until the leather will absorb no more of it; the boots are then laid by for a day or two, when the process is repeated. The *soles*, as well as the *uppers*, are to be thus rubbed, and the operation is to be performed either before the fire or in the sun. Since I have adopted this plan of treating my gunning boots I have never had a wet foot. It imparts an elastic pliancy to the leather, which, without the least exaggeration, would make one pair last as long as two which had not been so prepared.—*American Turf Register.*